### **UML**

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UML stands for Unified Modeling Language. UML is a way of visualizing a software program using a collection of diagrams. UML is accepted by the <u>Object Management Group (OMG)</u> as the standard for modeling software development.

UML 2.0

Here are some of the changes made to UML diagrams in UML 2.0:

- Improved integration between structural models like class diagrams and behavior models like activity diagrams.
- Added the ability to define a hierarchy and decompose a software system into components and sub-components.

Original UML specified 9 diagrams whereas UML 2.x specifies 13 diagrams. The four new diagrams are: communication diagram, composite structure diagram, interaction overview diagram, and timing diagram. It also renamed state chart diagrams to state machine diagrams, also known as state diagrams.

# Types of UML Diagrams:

#### **Structural UML diagrams** (6)

- Class diagram
- Package diagram
- Object diagram
- Component diagram
- Composite structure diagram
- Deployment diagram

#### Behavioral UML diagrams (7)

- Activity diagram
- Sequence diagram
- Use case diagram
- State diagram
- Communication diagram
- Interaction overview diagram
- Timing diagram

Lets see a brief of each of this:

## **Class Diagram:**